



Specifications for Some Essential PPE Supply Needs

The District of Columbia is seeking to work with CBEs, businesses and manufacturers to procure essential supplies and services to support personnel on the front lines of the coronavirus (COVID-19) response. The District is especially seeking companies who can produce or sell personal protective equipment (PPE) and medical supplies.

Level 3 & 4 Isolation Gowns



Isolation Gowns (Level 3 and 4)

- Single use level 3 & Level 4 isolation meeting standard of either
 - NFPA 1999 garments
 - ASTM F1671 (pass) and high levels of tensile strength (≥ 50 N), tear resistance (≥ 17 N), and seam strength (≥ 50 N) using the methods in NFPA 1999

OR

- Universal-size, plastic-film impervious gown with perforated back with thumb holes, adjustable cuff, or other garment retention that ensures its stability

NFPA 1999- Standard applies the performance, testing, design, and certification of new emergency medical garments; emergency medical examination gloves; emergency medical helmets; emergency medical face protection devices; emergency medical footwear and footwear covers; medical care facility footwear; and single-use and multiple-use, emergency protective ensembles

Level 3 & 4 Isolation Gowns (cont'd)



DC seeks
Level 3
and Level 4
Gowns and
Coverings

Level	Criteria for Usage	Appropriate Environmental Usage
1 ✗	<ul style="list-style-type: none"> Used for MINIMAL risk situations Provides a slight barrier to small amounts of fluid penetration Single test of water impacting the surface of the gown material is conducted to assess protection performance 	Basic care, standard hospital medical unit
2 ✗	<ul style="list-style-type: none"> Used in LOW risk situations Provides a barrier to larger amounts of fluids penetration through splatter and some fluid exposure through soaking Two tests are conducted to assess barrier protection performance: <ul style="list-style-type: none"> Water impacting the surface of the gown material Pressurizing the material 	Blood draw from a vein, suturing, intensive care unit, pathology lab
3 ✓	<ul style="list-style-type: none"> Used in MODERATE risk situations Provides a barrier to larger amounts of fluid penetration through splatter and fluid exposure through soaking than Level 2 Two tests are conducted to test barrier protection performance: <ul style="list-style-type: none"> Water impacting the surface of the gown material Pressurizing the material 	Arterial blood draw, Inserting an IV, Emergency Room Trauma
4 ✓	<ul style="list-style-type: none"> Used in HIGH risk situations Prevents all fluid penetration for up to 1 hour May prevent VIRUS penetration for up to 1 hour In addition to the other tests conducted under levels 1-3 barrier level performance is tested with a simulated blood containing a virus. If no virus is found at the end of the test, the gown passes 	Pathogen resistance. Infectious disease (non-airborne), Large amounts of fluid exposure over long periods

Nitrile Gloves



Gloves (Nitrile)

- Single-use examination gloves meeting standard of either:
 - NFPA 1999
 - ASTM D6319
- Minimum of 5 mil thickness
- Extended cuff (to ensure overlap with garment sleeve)
- Sizes desired: (XS, 1% Small 27%, Medium 45%, Large 26%, XL 1%)
- No vinyl gloves

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Face and Eye Protection



Face Shields

- Clear, durable and impervious face shields.

The majority of eye and face protection currently used in the U.S. is designed, tested, and manufactured in accordance with the American National Standards Institute (ANSI)/International Safety Equipment Association (ISEA) Z.87.1–2010 standard.

From the infection control standpoint, no standards currently exist regarding performance standards (International Safety Equipment Association (ISEA) : “Draft ISEA 119: Standard for eye and Face Protection against Biological Hazards.” Available at https://safetyequipment.org/userfiles/File/Background_statement.pdf)

N95 Masks



N95 Masks

- CDC/NOISH approved N95 masks in the following types and allotments:
 - 1860 (65%)
 - 1860S (15%)
 - 8210 (10%)
 - 9210 (10%)

Level 2 or 3 Medical Masks



Medical Masks (Level 2 or Level 3)

- Single-use medical masks rated ASTM F2100 Level 2 (or Level 3) or equivalent :
 - Fluid resistance at 120 mm Hg (Level 3 fluid resistance at 160 mm Hg)
 - Bacterial Filtration Efficiency at BFE $\geq 98\%$
 - Particulate Filtration Efficiency at PFE $\geq 98\%$ at 0.1 micron
 - Breathability at < 5.0 mm H₂O
 - Flame Spread at Class 1

ASTM F2100-11 STANDARDS

	ASTM Level 1	ASTM Level 2	ASTM Level 3
FLUID RESISTANCE, mmHg	80	120	160
BFE	$\geq 95\%$	$\geq 98\%$	$\geq 98\%$
PFE, @ 0.1 micron	$\geq 95\%$	$\geq 98\%$	$\geq 98\%$
DELTA P, mm H ₂ O/cm ²	< 4.0	< 5.0	< 5.0
FLAME SPREAD	Class 1	Class 1	Class 1

Non-Medical Face Coverings



Non-Medical Face Coverings

- Disposable 3-ply masks OR reusable, washable fabric masks.